	_
INFORMATION DISCLOSURE	Г
STATEMENT BY APPLICANT	r

(Lee or many cheets as personant)

Substitute for form 1449/PTO

S	neet	1	of	25	Attorney Do

Complete if Known				
Application Number	10/660,998			
Filing Date	9/12/2003			
First Named Inventor	David Ecker			
Art Unit	1637			
Examiner Name	Suryaprabha Chanduru			
Attorney Docket Number	DIBIS-0002US.P5			

Examiner Cite			Publication Date	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Releva	
	Number - Kind Code ² (if known)	MM-DD-YYYY	Cited Document	Passages or Relevant Figures Appear		
		US 5,436,129	07/25/95	Stapleton		
		US 5,451,500	09/19/95	Stapleton		
		US 5,484,908	01/16/96	Froehler et al.		
		US 5,502,177	03/26/96	Matteucci et al.		
		US 5,503,980	04/02/96	Cantor		
		US 5,523,217	06/04/96	Lupski et al.		
		US 5,527,675	06/18/96	Coull et al.		
		US 5,567,587	10/22/96	Kohne		
		US 5,580,733	12/03/96	Levis et al.		
		US 5,625,184	04/29/97	Vestal et al.		
		US 5,645,985	07/08/97	Froehler et al.		
		US 5,686,242	11/11/97	Bruice et al.		
		US 5,700,642	12/23/97	Monforte et al.		
		US 5,707,802	01/13/098	Sandhu et al.		
		US 5,727,202	03/10/98	Kucala		
		US 5,745,751	04/28/98	Nelson et al.		
		US 5,759,771	06/02/98	Tilanus		
		US 5,763,169	06/09/98	Sandhu et al.		
		US 5,763,588	07/09/98	Matteucci et al.		
		US 5,770,367	06/23/98	Southern et al.		

	FOREIGN PATENT DOCUMENTS						
Evenines	Cite	Foreign Patent Document	Publication	Name of Patentee or	Pages, Columns, Lines, Where Relevant		
	No.1	Country Code ⁵ - Number ⁶ - Kind Code ⁵ (If known)	Date MM-DD-YYYY	Applicant of Cited Document	Passages or Relevant Figures Appear	T ⁶	
		DE 19802905	07/29/99	Bruker Daltonik			
		DE 19824280	12/02/99	Bruker Daltonik			
		DE 19852167	05/31/00	Bruker-Saxonia			
		EP 1138782	02/05/03	Bruker-Saxonia			
		EP 1234888	01/02/04	Bruker Daltonik			
		EP 1333101	08/06/03	Bruker Daltonik			
		GB 2325002	11/11/98	Bruker Franzen			
		GB 2339905	02/09/00	Bruker Daltonik			
		WO 92/008117	05/14/92	Tilanus			
		WO 93/003186	02/18/93	Hoffman LaRoche			

Examiner Signature	- A	Date Considered	
-----------------------	-----	--------------------	--

EXAMINER Initial if reference considered, whether or not obtains is in conformance with MPEP 009. Draw line through obtains if not in conformance and not considered include copy of this form with next communication to applicant. Applicants unique cotation designation number (optional). See Kinds Codes of USEPTO accept Documents at www.uspto.gov on MPEP 001 04 Extend Collect his saved the document, by the hoteleter pode (MPP 03 anded 45 Ts). For Japanese patient documents, the indication of the year of the teign of the Emperor must proceed the setial number of the patent document. Kind of document by the appropriate symbols as indicated on the document will be set to place a check mank here if English an language Transfortion is attached.
WEO Sanadud ST 16 if possible Applicant is to place a check mank here if English anguage Transfortion is attached.
This collection of information is required by 37 CFR 19 and 198 The information is required to obtain or retain a chemit by the public which is to file (and by the USPTO to

Into collection or information is required by 3°C FR 167 and 136. The information is required to obtain or retain a benefit by the public which is to file (graf by the USPTO) to processe) an application. Conferentiality a generate by 3°U SC 17 and 3°C FR 1.14 file (inclidents is estimated to table 2 hours to comprehe, including pathings preparing, and salarnility, the completed application form to the USPTO Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or segregorisor for including the busides, should be seen to the Chell Information Officer. U.S Pathing and Tradential Officer. U.S Department of Commerce, P.O. Box 150, Alexandria, V.A. 2231-31450. DO NOT SEND FIEES OR COMPLETED FORMS TO THIS ADDRESS SEND TO. Commissioner for Patents, P.O. Box 1450, Alexandria, V.A. 2331-31450.

INFORMATION DISCLOSURE
STATEMENT BY APPLICANT

Substitute for form 1449/PTO

	(Use as many site	Examiner Name		
Sheet	2	of	25	Attorney Docket Number

Complete if Known				
Application Number	10/660,998			
Filing Date	9/12/2003			
First Named Inventor	David Ecker			
Art Unit	1637			
Examiner Name	Suryaprabha Chanduru			
Attorney Docket Number	DIBIS-0002US.P5			

U.S. PATENT DOCUMENTS					
Examiner Cite No.1		Document Number Number - Kind Code ² (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevan Passages or Relevant Figures Appear
		US 5,777,324	07/07/98	Hillenkamp	
		US 5,830,653	11/03/98	Froehler et al.	
		US 5,830,655	11/03/98	Monforte et al.	
		US 5,832,489	11/03/98	Kucala	
		US 5,851,765	12/22/98	Koster	
		US 5,864,137	01/26/99	Becker et al.	
		US 5,869,242	02/09/99	Kamb	
		US 5,871,697	02/16/99	Rothberg et al.	
		US 5,876,936	03/02/99	Ju	
		US 5,928,906	07/27/99	Koster	
		US 5,976,798	11/02/99	Parker et al.	
		US 5,981,176	11/09/99	Wallace	
		US 5,981,190	11/09/99	Israel	
		US 5,994,066	11/30/99	Bergeron et al.	
		US 6,001,564	12/14/99	Bergeron et al.	
		US 6,005,096	12/21/99	Matteucci et al.	
		US 6,007,992	12/28/99	Lin et al.	
		US 6,018,713	01/25/00	Coli et al.	
		US 6,028,183	02/22/00	Lin et al.	
		US 6.046.005	04/04/00	Ju	

,	FOREIGN PATENT DOCUMENTS						
Examiner	Cite	Foreign Patent Document	Publication	Name of Patentee or	Pages, Columns, Lines, Where Relevant		
	No.1	lo.1	Date MM-DD-YYYY	Applicant of Cited Document	Passages or Relevant Figures Appear	T ⁶	
		WO 93/008297	04/29/93	Baylor Cllg of Med.			
		WO 94/016101	07/21/94	Sequenom-Koster			
		WO 94/021822	09/29/94	Sequenom-Koster			
		WO 95/004161	02/09/95	Pena et al.			
		WO 95/013396	05/18/95	U-Gene Research			
		WO 96/029431	09/26/96	Sequenom			
		WO 96/032504	10/17/96	Boston Univ.			
		WO 96/037630	11/28/96	SRI Int.			
		WO 98/003684	01/29/98	Hybridon Inc.			
		WO 98/014616	04/09/98	Persentive Bio.			

Examiner Signature		Date Considered	
-----------------------	--	--------------------	--

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 009. Draw line through citation if not in conformance and not considered include copy of this form with next communication to applicant. Applicants unique citation designation number (optional). *See Kinds Codes of USP1 Dratent Documents at www.uspto.gov on MPEP 901 04. *Enter Office that issued the document, by the indication of the year of the teign of the Emperor must proceed the setial number of the patent document. Kind of document by the appropriate symbols as indicated on the document will be set to place a check many the patent of the

Into collection or information is required by 3°C FR 167 and 136. The information is required to obtain or retain a benefit by the public which is to file (graf by the USPTO) to processe) an application. Conferentiality a generated by 3°U SC 17 and 3°C FR 1.14 file (socidation is estimated to table 2 hours to comprehe, including pathings preparing, and salarnility, the completed application form to the USPTO Time will vary depending upon the individual case. Any comments on the amount of time you require to complete in formation and business, should be seen to the Chell Information Officer. U.S Pathing and Talledman (Officer) U.S Department of Commerce, P.O. Box 150, Alexandria, V.A. 2231-31400. DO NOT SEND FIEES OR COMPLETED FORMS TO THIS ADDRESS SEND TO. Commissioner for Patents, P.O. Box 1450, Alexandria, V.A. 2331-31450.

•	Substitute	for form 1449/PTO				Complete if Known	,
					Application Number	10/660,998	
	INFO	RMATION	DIS	CLOSURE	Filing Date	9/12/2003	
	STAT	EMENT B	Y AI	PPLICANT	First Named Inventor	David Ecker	
					Art Unit	1637	
		(Use as many she	ets as	necessary)	Examiner Name	Suryaprabha Chanduru	
_	Sheet	3	of	25	Attorney Docket Number	DIBIS-0002US.P5	

U.S. PATENT DOCUMENTS								
Examiner Initials *	Cite No.	Document Number Number - Kind Code ² (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Releval Passages or Relevant Figures Appear			
		US 6,051,378	04/18/00	Monforte et al.	1 2 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3			
		US 6,054,278	04/25/00	Dodge et al.				
		US 6,055,487	04/25/00	Margery et al.				
		US 6,061,686	05/09/00	Gauvin et al.				
		US 6,074,823	06/13/00	Koster				
		US 6,074,831	06/13/00	Yakhini et al.				
		US 6,090,558	07/18/00	Butler et al.				
		US 6,104,028	08/15/00	Hunter et al.				
		US 6,111,251	08/29/00	Hillenkamp				
		US 6,140,053	10/31/00	Koster				
		US 6,146,144	11/14/00	Fowler et al.				
		US 6,153,389	11/28/00	Haarer et al.				
		US 6,159,681	12/12/00	Zebala				
		US 6,180,339	01/30/01	Sandhu et al.				
		US 6,180,372	01/30/01	Franzen				
		US 6,194,144	02/27/01	Koster				
		US 6,197,498	03/06/01	Koster				
		US 6,218,118	04/17/01	Sampson et al.				
		US 6,221,587	04/24/01	Ecker et al.				
		119 6 221 601	04/24/01	Voctor at al				

	FOREIGN PATENT DOCUMENTS							
Examiner Initials*	0"-	Foreign Patent Document	Publication	Name of Patentee or	Pages, Columns, Lines,			
	Cite No.1	Country Code ⁵ - Number ⁶ - Kind Code ⁵ (if known)	Publication Date MM-DD-YYYY	Applicant of Cited Document	Where Relevant Passages or Relevant Figures Appear	T ⁶		
		WO 98/015652	04/16/98	Brax Genomics				
		WO 98/020020	05/14/98	Sequenom Inc.				
		WO 98/020157	05/14/98	Infect. Diagnostic				
		WO 98/026095	06/18/98	GeneTrace Systems				
		WO 98/031830	07/23/98	Brax Genomics				
		WO 98/040520	09/17/98	Hybridon Inc.				
		WO 99/005319	02/04/99	Rapigene				
		WO 99/012040	03/11/99	Sequenom				
		WO 99/029898	06/17/99	Max-Planck-Gesell.				
		WO 99/057318	11/11/99	Hillenkamp				

Examiner Signature		Date Considered	
-----------------------	--	--------------------	--

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 009. Draw line through citation if not in conformance and not considered include copy of this form with next communication to applicant. Applicants unique citation designation number (optional). *See Kinds Codes of USP1 Dratent Documents at www.uspto.gov on MPEP 901 04. *Enter Office that issued the document, by the indication of the year of the teign of the Emperor must proceed the setial number of the patent document. Kind of document by the appropriate symbols as indicated on the document will be set to place a check many the patent of the

Into collection or information is required by 3°C FR 167 and 136. The information is required to obtain or retain a benefit by the public which is to file (graf by the USPTO) to processe) an application. Conferentiality a generated by 3°U SC 17 and 3°C FR 1.14 file (noticeton is estimated to table 2 hours to comprehe, including pathings preparing, and salarnility, the completed application form to the USPTO Time will vary depending upon the individual case. Any comments on the amount of time you require to complete in formation and business, should be seen to the Chell Information Officer. U.S Pathing and Talledman Officer. U.S Department of Commence, P.O. Box 150, Alexandria, V.A. 2231-31400. DO NOT SEND FIEES OR COMPLETED FORMS TO THIS ADDRESS SEND TO. Commissioner for Patents, P.O. Box 1450, Alexandria, V.A. 2331-31450.

10/660 998

9/12/2003 David Ecker

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

	Application Number
INFORMATION DISCLOSURE	Filing Date
STATEMENT BY APPLICANT	First Named Inventor

Substitute for form 1449/PTO

				Art Unit	1637
	(Use as many she	ets as	necessary)	Examiner Name	Suryaprabha Chanduru
Sheet	4	of	25	Attorney Docket Number	DIBIS-0002US.P5

	U.S. PATENT DOCUMENTS							
Examiner Cite		Document Number	Publication Date	Name of Patentee or Applicant of	Pages, Columns, Lines, Where Relevant			
Initials *	No.	Number - Kind Code ² (if known)	MM-DD-YYYY	Cited Document	Passages or Relevant Figures Appear			
		US 6,221,605	04/24/01	Koster				
		US 6,225,450	05/01/01	Koster				
		US 6,235,476	05/22/01	Bergmann et al.				
		US 6,235,478	05/22/01	Koster				
		US 6,235,480	05/22/01	Shultz et al.				
		US 6,238,871	05/29/01	Koster				
		US 6,238,927	05/29/01	Abrams et al.				
		US 6,258,538	07/10/01	Koter et al.				
		US 6,265,716	07/24/01	Hunter et al.				
		US 6,268,129	07/31/01	Gut et al.				
		US 6,268,131	07/31/01	Kang et al.				
		US 6,268,144	07/31/01	Koster				
		US 6,268,146	07/31/01	Shultz				
		US 6,270,973	08/07/01	Lewiz et al.				
		US 6,270,974	08/07/01	Shultz et al.				
		US 6,277,573	08/21/01	Koster et al.				
		US 6,277,578	08/21/01	Shultz et al.				
		US 6,300,076	10/09/01	Koster				
		US 6,303,297	10/16/01	Lincoln et al.				
		US 6,312,893	11/06/01	Van Ness et al.				

	FOREIGN PATENT DOCUMENTS							
Examiner Initials*	Cite	Foreign Patent Document	Publication	Name of Patentee or	Pages, Columns, Lines,			
	No.1	Country Code ⁸ - Number ⁶ - Kind Code ⁵ (if known)	Date MM-DD-YYYY	Applicant of Cited Document	Where Relevant Passages or Relevant Figures Appear	T ⁶		
		WO 01/007648	02/01/01	Artus Gesellschaft				
		WO 01/023604	04/05/01	Infectio Diagnostic				
		WO 01/032930	05/10/01	Cal. Inst. Tech.				
		WO 01/051661	07/19/01	Amsterdam Supp.				
		WO 01/057263	08/09/01	Advion Biosciences				
		WO 01/057518	08/09/01	Goodnough				
		WO 01/073199	10/04/01	Ct. Applic. Mol.				
		WO 02/010186	02/07/02	Cal. Inst. Tech.				
		WO 02/010444	02/07/02	Univ. Sydney				
		WO 02/018641	03/07/02	Gemini Genomics				

Examiner Signature		Date Considered	
-----------------------	--	--------------------	--

EXAMINER Initial if reference considered, whether or not obtains is in conformance with MPEP 009. Draw line through citation if not in conformance and not considered include copy of this form with next communication to applicant. Applicants unique citation designation number (optional). See Kinds Codes of USEPTO accept Documents at www.uspto.gov on MPEP 001 04 Extent Clinic but is sued to document, by the violetter code (MPEP 03 of 46 Extent Clinic but is sued to document, by the violetter code (MPEP 03 of 46 Extent Clinic but is sued to document, but indication of the year of the teign of the Emperor must proceed the setial number of the patent document. Kind of document by the appropriate symbols as indicated on the document will be set to place a check many the patent of the

Into collection or information is required by 3°C FR 167 and 136. The information is required to obtain or retain a benefit by the public which is to file (graf by the USPTO) to processe) an application. Conferentiality a generated by 3°U SC 17 and 3°C FR 1.14 file (socidation is estimated to table 2 hours to comprehe, including pathings preparing, and salarnility, the completed application form to the USPTO Time will vary depending upon the individual case. Any comments on the amount of time you require to complete in formation and business, should be seen to the Chell Information Officer. U.S Pathing and Talledman (Officer) U.S Department of Commerce, P.O. Box 150, Alexandria, V.A. 2231-31400. DO NOT SEND FIEES OR COMPLETED FORMS TO THIS ADDRESS SEND TO. Commissioner for Patents, P.O. Box 1450, Alexandria, V.A. 2331-31450.

_	Substitute	for form 1449/PTO				Complete if Known	,
					Application Number	10/660,998	
				CLOSURE	Filing Date	9/12/2003	
	STAT	EMENT B	Y AI	PPLICANT	First Named Inventor	David Ecker	
					Art Unit	1637	
		(Use as many she	ets as	necessary)	Examiner Name	Suryaprabha Chanduru	
Ū	Sheet	5	of	25	Attorney Docket Number	DIBIS-0002US.P5	

			U.S. PATENT D	OCUMENTS		
Examiner	Cite	Document Number	Publication Date	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant	
Initials *	No.1	Number - Kind Code ² (if known)	MM-DD-YYYY	Cited Document	Passages or Relevant Figures Appear	
		US 6,312,902	11/06/01	Shultz et al.		
		US 6,322,970	11/27/01	Little et al.		
		US 6,361,940	03/26/02	Van Ness et al.		
		US 6,372,424	04/16/02	Brow et al.		
		US 6,389,428	05/14/02	Rigault et al.		
		US 6,391,551	05/21/02	Shultz et al.		
		US 6,393,367	05/21/02	Tang et al.		
	1	US 6,419,932	07/16/02	Dale		
		US 6,423,966	07/23/02	Hillenkamp et al.		
		US 6,428,955	08/06/02	Koster et al.		
		US 6,432,651	08/13/02	Hughes et al.		
		US 6,436,635	08/20/02	Fu et al.		
		US 6,436,640	08/20/02	Simmons et al.		
		US 6,458,533	10/01/02	Felder et al.		
		US 6,468,743	10/22/02	Romick et al.		
		US 6,468,748	10/22/02	Monforte et al.		
		US 6,475,143	11/05/02	Hiff		
		US 6,475,736	11/05/02	Stanton Jr.		
		US 6,479,239	11/12/02	Anderson et al.		
		US 6 500 621	12/31/02	Koster		

	FOREIGN PATENT DOCUMENTS							
Examiner Initials*	Cite	Foreign Patent Document	Publication	Name of Patentee or	Pages, Columns, Lines,			
	No.1	Country Code ⁵ - Number ⁶ - Kind Code ⁵ (if known)	Date MM-DD-YYYY	Applicant of Cited Document	Where Relevant Passages or Relevant Figures Appear	T ⁶		
		WO 02/021108	03/14/02	Large Scale Prot.				
		WO 02/022873	03/21/02	Gyllesten et al.				
		WO 02/050307	06/27/02	Chugai Seiyaku				
		WO 02/057491	07/25/02	Leland Stanford				
		WO 02/070664	09/12/02	Isis Pharma.				
		WO 02/077278	10/03/02	Cncl. Sci. Ind. Res.				
		WO 02/099034	12/12/02	Infect. Diagnostic				
		WO 03/002750	01/09/03	High Through. Gen.				
		WO 03/008636	01/30/03	Infectio Diagnostic				
		WO 03/016546	02/27/03	Whatman Inc.				

Examiner Signature		Date Considered	
-----------------------	--	--------------------	--

EXAMINER Initial if reference considered, whether or not obtains is in conformance with MPEP 009. Draw line through obtains if not in conformance and not considered include copy of this form with next communication to applicant. Applicants unique cotation designation number (optional). See Kinds Codes of USEPTO accept Documents at www.uspto.gov on MPEP 001 04 Extent Cline that issued the document, by the hoteleter pode (MPP 03 anded 45 Ts). For Japanese patient documents, the indication of the year of the teign of the Emperor must proceed the setial number of the patent document. Kind of document by the appropriate symbols as indicated on the document will be set to place a check mank here if English managuage Transfortion is attached.
WEO Standard ST 16 if possible Applicant is to place a check mank here if English managuage Transfortion is attached.
This collection of information is required by 37 CFR 19 and 198 The information is required to obtain or retain a chemistry of the public which is to file (and by the USPTO to

Into collection or information is required by 3°C FR 167 and 136. The information is required to obtain or retain a benefit by the public which is to file (graf by the USPTO) to processe) an application. Conferentiality a generate by 3°U SC 17 and 3°C FR 1.14 file (inclidents is estimated to table 2 hours to comprehe, including pathings preparing, and salarnility, the completed application form to the USPTO Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or segregorisor for including the busides, should be seen to the Chell Information Officer. U.S Pathing and Tradential Officer. U.S Department of Commerce, P.O. Box 150, Alexandria, V.A. 2231-31450. DO NOT SEND FIEES OR COMPLETED FORMS TO THIS ADDRESS SEND TO. Commissioner for Patents, P.O. Box 1450, Alexandria, V.A. 2331-31450.

10/660 998 9/12/2003

David Ecker

1637

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Inventor

	Application Number
INFORMATION DISCLOSURE	Filing Date
STATEMENT BY APPLICANT	First Named Invento

Substitute for form 1449/PTO

(Use as many sheets as necessary)			necessary)	Examiner Name	Suryaprabha Chanduru
Sheet	6	of	25	Attorney Docket Number	DIBIS-0002US.P5

Art Unit

			U.S. PATENT D	OCUMENTS	
Examiner	Cite	Document Number	Publication Date	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevan
Initials * No.1	Number - Kind Code ² (if known)	MM-DD-YYYY		Passages or Relevant Figures Appear	
		US 6,553,317	04/22/03	Lincoln et al.	
		US 6,558,902	05/06/03	Hillenkamp	
		US 6,566,055	05/20/03	Monforte et al.	
		US 6,582,916	06/24/03	Schmidt et al.	
		US 6,589,485	07/08/03	Koster	
		US 6,602,662	08/05/03	Koster et al.	
		US 6,613,509	09/02/03	Chen	
		US 6,623,928	09/23/03	Van Ness et al.	
		US 6,682,889	01/27/04	Wang et al.	
		US 7,217,510	05/01/07	Ecker et al.	
		US 7,226,739	09/04/07	Ecker et al.	
		US 7,255,992	08/01/07	Ecker et al.	
		US 2002/0045178	04/18/02	Cantor et al.	
		US 2002/0137057	09/26/02	Wold et al.	
		US 2002/0138210	09/26/02	Wilkes et al.	
		US 2002/0150903	10/17/02	Koster et al.	
		US 2002/0150927	10/17/02	Matray et al.	
		US 2002/0168630	11/14/02	Fleming et al.	
		US 2003/0017487	01/23/03	Xue et al.	
		US 2003/0027135	02/06/03	Ecker et al.	

FOREIGN PATENT DOCUMENTS						
Examiner Cite No.1	0111	Foreign Patent Document		Name of Patentee or	Pages, Columns, Lines,	
	Country Code ³ - Number ⁶ - Kind Code ⁵ (if known)	Publication Date MM-DD-YYYY	Applicant of Cited Document	Where Relevant Passages or Relevant Figures Appear	T ⁶	
		WO 03/060163	07/24/03	Keygene N.V.		
		WO 03/088979	10/30/03	Univ. Montpellier		
		WO 03/093506	11/13/03	Renovo Limited		
		WO 03/097869	11/27/03	Con Cipio Gmbh		
		WO 04/052175	06/24/04	Isis Pharma.		
		WO 05/053141	06/09/05	Sanken Electric		

Examiner Signature		Date Considered	
-----------------------	--	--------------------	--

EXAMINER Initial if reference considered, whether or not obtains is in conformance with MPEP 009. Draw line through citation if not in conformance and not considered include copy of this form with next communication to applicant. Applicants unique citation designation number (optional). See Kinds Codes of USEPTO accept Documents at www.uspto.gov on MPEP 001 04 Extent Clinic but is sued to document, by the hoteleter pode (MPEP 001 404). For Japanese patient documents, the indication of the were of the reign of the Emperor must precede the serial number of the patent document. *Kind of document by the appropriate symbols as indicated on the document under WEO Standard ST 16 | Special is to place a check mark here if English language Translation is attached.

WEO Standard ST 16 | Special is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 19 and 198. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to

Into collection or information is required by 3°C FR 167 and 136. The information is required to obtain or retain a benefit by the public which is to file (graf by the USPTO) to processe) an application. Conferentiality a generated by 3°U SC 17 and 3°C FR 1.14 file (noticeton is estimated to table 2 hours to comprehe, including pathings preparing, and salarnility, the completed application form to the USPTO. Time well vary depending upon the individual case. Any comments on the amount of time you require to complete into man active agreeors for frequiring the busines, should be seen to the Chell Information Officer. US Pathing and Traderist of ROT US. Department of Commence, P.O. Box 150, Alexandria, V.A. 2231-31450. DO NOT SEND FIEES OR COMPLETED FORMS TO THIS ADDRESS SEND TO. Commissioner for Patents, P.O. Box 1450, Alexandria, V.A. 2331-31450.

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

Substitute for form 1449/PTO

Sheet

(Use as many sheets as necessary) of

	Complete if Known
Application Number	10/660,998
Filing Date	9/12/2003
First Named Inventor	David Ecker
Art Unit	1637
Examiner Name	Suryaprabha Chanduru
Attorney Docket Number	DIBIS-0002US.P5

			U.S. PATENT D	OCUMENTS	
Examiner Initials *	Cite No.1	Document Number Number - Kind Code ² (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		US 2003/0039976	02/27/03	Haff et al.	
		US 2003/0064483	04/03/03	Shaw et al.	
		US 2003/0073112	04/17/03	Zhang et al.	
		US 2003/0113745	06/19/03	Monforte et al.	
		US 2003/0124556	07/03/03	Ecker et al.	
		US 2003/0129589	07/10/03	Koster et al.	
		US 2003/0134312	07/17/03	Burgyone et al.	
		US 2003/0148284	08/07/03	Vision et al.	
		US 2003/0175695	09/18/03	Ecker et al.	
		US 2003/0175696	09/18/03	Ecker et al.	
		US 2003/0175697	09/18/03	Ecker et al.	
		US 2003/0175729	09/18/03	Van Eijk et al.	
		US 2003/0190605	10/09/03	Ecker et al.	
		US 2003/0194699	10/16/03	Lewis et al.	
		US 2003/0203398	10/30/03	Bramucci et al.	
		US 2003/0220844	11/27/03	Marmellos et al.	
		US 2004/0005555	01/08/04	Rothman et al.	
		US 2004/0038206	02/26/04	Zhang et al.	
		US 2004/0038234	02/26/04	Gut et al.	
		US 2004/0038385	02/26/04	Langlois et al.	

	FOREIGN PATENT DOCUMENTS						
Examiner Cite		Foreign Patent Document	Publication	Name of Patentee or	Pages, Columns, Lines, Where Relevant		
Initials*	No.1	Country Code ⁵ - Number ⁶ - Kind Code ⁵ (# known)	Date MM-DD-YYYY	Applicant of Cited Document	Passages or Relevant Figures Appear	T ⁶	
						-	
						_	
			l				
		l	i	I	ı	i	

Examiner Signature		Date Considered	
-----------------------	--	--------------------	--

EXAMINER Initial if reference considered, whether or not obtains is in conformance with MPEP 009. Draw line through citation if not in conformance and not considered include copy of this form with next communication to applicant. Applicants unique citation designation number (optional). See Kinds Codes of USEPTO accept Documents at www.uspto.gov on MPEP 001 04 Extent Cline that saved the document, by the hoteleter pode (MPEP 03 of Marie Extent Cline that saved the document, but the hoteleter pode (MPEP 03 of Marie Extent Cline that saved the document, but the hoteleter pode (MPEP 03 of Marie Extent Cline that saved the document, but the hoteleter pode (MPEP 03 of Marie Extent Cline that saved the document, but the hoteleter pode (MPEP 03 of Marie Extent Cline that saved the document of Marie M were of the reign of the Emperor must precede the serial number of the patent document. *Kind of document by the appropriate symbols as indicated on the document under WEO Standard ST 16 | Special is to place a check mark here if English language Translation is attached.

WEO Standard ST 16 | Special is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 19 and 198. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to

PTO/SB/08A (04-07)
Approved for use through 09/30/2007. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE Complete if Known

10/660 998

9/12/2003

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO Application Number INFORMATION DISCLOSURE Filing Date STATEMENT BY APPLICAN

(Use as many sheets as necessary) Sheet 8 of 25

_	1 ming Dute	3/12/2003
Т	First Named Inventor	David Ecker
	Art Unit	1637
	Examiner Name	Suryaprabha Chanduru
	Attorney Docket Number	DIBIS-0002US.P5

U.S. PATENT DOCUMENTS						
Examiner Initials *	Cite No.	Document Number Number - Kind Code ² (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	
		US 2004/0110169	06/10/04	Ecker et al.		
		US 2004/0161770	08/19/04	Ecker et al.		
		US 2004/0180328	09/16/04	Ecker et al.		
		US 2004/0202997	10/14/04	Ecker et al.		
		US 2004/0219517	11/04/04	Ecker et al.		
		US 2006/0275788	12/07/06	Ecker et al.		
		US 2006/0121520	06/08/06	Ecker et al.		
			İ			

	FOREIGN PATENT DOCUMENTS									
Examiner Cite	Cite Foreign Patent Document Publication	Name of Patentee or	Pages, Columns, Lines, Where Relevant							
Initials*	No.	Country Code ⁵ - Number ⁶ - Kind Code ⁵ (# known)	Date MM-DD-YYYY	Applicant of Cited Document	Passages or Relevant Figures Appear	T ⁶				
						_				
				l	l	-				
						_				

Į	Signature		Considered	
		f reference considered, whether or not citation is in conformance w		

include copy of this form with next communication to applicant. 'Applicant's unique citation designation number (optional). 'See Kinds Codes of USPTO Patent Documents at https://www.usgto.gog/ or MPEP 901 04. 'Enter Office that issued the document, by the two-letter code (WIPO Standard ST3). 'For Japanese patent documents, the indication of the INVINSION DE VIDEO DE CINE OUIDE that assets the document, by the row-sense to one (previousment of 1-y). For adjanteness patern documents, the instruction of the year of the reging of the Emperor must precede the sensit number of the paterts document. Who discounted by the paperpoints symbols as the instruction of the document by the patern of the p

Into collection or information is required by 3°C FR 167 and 136. The information is required to obtain or retain a benefit by the public which is to file (graf by the USPTO) to processe) an application. Conferentiality a generated by 3°U SC 17 and 3°C FR 1.14 file (noticeton is estimated to table 2 hours to comprehe, including pathings preparing, and salarnility, the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete in formation and business, should be seen to the Chell Information Officer. U.S Pathing and Traderist of City. U.S Department of Commence, P.O. Box 150, Alexandria, V.A. 2231-31450. DO NOT SEND FIEES OR COMPLETED FORMS TO THIS ADDRESS SEND TO. Commissioner for Patents, P.O. Box 1450, Alexandria, V.A. 2331-31450.

Substitu	te for form 1449/PTO				Complete if Known
	ORMATION	DIO.	CL COLUDE	Application Number	10/660,998
				Filing Date	9/12/2003
STA	TEMENT B	ΥAI	PPLICANT	First Named Inventor	David Ecker
				Art Unit	1637
	(Use as many she	eets as	necessary)	Examiner Name	Suryaprabha Chanduru
Sheet	9	of	25	Attorney Docket Number	DIBIS-0002US.P5

		NON PATENT LITERATURE DOCUMENTS	_
Examiner Initials *	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	т:
		ALVES-SILVA, J. et al., "The Ancestry of Brazilian mtDNA Lineages," Am. J. Hum. Genet. (2000) 67:444-461.	
		ANDERSON et al., "Sequence and organization of the human mitochondrial genome," Nature (1981) 290:457-465.	
		ANDREASSON et al., "Mitochondrial Sequence Analysis for Forensic Identification Using Pyrosequencing Technology" BioTechniques (2002) 32:124-133.	
		Application Serial No: 09/798,007 Office Communication Mailed 04/16/02 (DIBIS-0002US)	
		Application Serial No: 09/798,007 Office Communication Mailed 06/20/02 (DIBIS-0002US)	
		Application Serial No: 09/798,007 Office Communication Mailed 11/06/02 (DIBIS-0002US)	
		Application Serial No: 09/798,007 Office Communication Mailed 01/08/03 (DIBIS-0002US)	
		Application Serial No: 09/798,007 Office Communication Mailed 01/31/03 (DIBIS-0002US)	
		Application Serial No: 09/798,007 Office Communication Mailed 02/27/03 (DIBIS-0002US)	
		Application Serial No: 09/798,007 Office Communication Mailed 05/20/03 (DIBIS-0002US)	
		Application Serial No: 09/798,007 Office Communication Mailed 07/11/03 (DIBIS-0002US)	
		Application Serial No: 09/798,007 Office Communication Mailed 09/22/03 (DIBIS-0002US)	
		Application Serial No: 09/798,007 Office Communication Mailed 11/19/03 (DIBIS-0002US)	

Examiner Signature

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance

and not considered. Include copy of this form with next communication to applicant.

*Applicants' unsigned called necessary of the form with next communication to applicant.

*Applicants' unsigned called necessary communication number optionism," Applicants in suples on check must keer if English Inaquagner Translation is natached.

This collection of information is required by 37 CFR 1.98. The information is required to Odain or retain a benefit by the public which is to file (and by the USPTO) to process an application. Confidentiality is governed by 35 U.S. 1.22 and 37 CFR 1.43. This collection is estimated to take 120 minutes. to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450

Substitute f	or form 1449/PTO			(Complete if Known
	ON A TION	DIO.	CL CCUPE	Application Number	10/660,998
			CLOSURE	Filing Date	9/12/2003
STAT	EMENTB	ΥAI	PPLICANT	First Named Inventor	David Ecker
				Art Unit	1637
	(Use as many she	ets as	necessary)	Examiner Name	Suryaprabha Chanduru
Sheet	10	of	25	Attorney Docket Number	DIBIS-0002US.P5

		NON PATENT LITERATURE DOCUMENTS	
Examiner Initials *	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher of tyl and/or country where published.	T2
		Application Serial No: 09/798,007 Office Communication Mailed 06/30/04 (DIBIS-0002US)	
		Application Serial No: 09/798,007 Office Communication Mailed 08/10/04 (DIBIS-0002US)	T
		Application Serial No: 09/798,007 Office Communication Mailed 02/10/05 (DIBIS-0002US)	
		Application Serial No: 10/156,608 Office Communication Mailed 04/01/04 (DIBIS-0002US.D1)	
		Application Serial No: 10/156,608 Office Communication Mailed 08/10/04 (DIBIS-0002US.D1)	
		Application Serial No: 10/156,608 Office Communication Mailed 10/14/04 (DIBIS-0002US.D1)	H
		Application Serial No: 10/156,608 Office Communication Mailed 11/19/04 (DIBIS-0002US.D1)	i
		Application Serial No: 10/156,608 Office Communication Mailed 12/09/04 (DIBIS-0002US.D1)	H
		Application Serial No: 10/156,608 Office Communication Mailed 05/10/05 (DIBIS-0002US.D1)	H
		Application Serial No: 10/156,608 Office Communication Mailed 05/26/05 (DIBIS-0002US.D1)	
		Application Serial No: 10/156,608 Office Communication Mailed 07/20/05 (DIBIS-0002US.D1)	
		Application Serial No: 10/156,608 Office Communication Mailed 09/15/05 (DIBIS-0002US.D1)	
		Application Serial No: 10/156,608 Office Communication Mailed 06/02/05 (DIBIS-0002US.D1) with associated Information Disclosure Statement filed 11/28/2005.	

Examiner	Date
Signature	Considered

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance

and not considered. Include copy of this form with next communication to applicant.

*Applicants' unsigned called reducing the control of the to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450

$\overline{}$	Substitute fe	or form 1449/PTO				Complete if Known
	INICO	A TION	DIO.	CL COLLDE	Application Number	10/660,998
				CLOSURE	Filing Date	9/12/2003
	STATI	EMENT B	Y A	PPLICANT	First Named Inventor	David Ecker
					Art Unit	1637
		(Use as many she	ets as	necessary)	Examiner Name	Suryaprabha Chanduru
\subset	Sheet	11	of	25	Attorney Docket Number	DIBIS-0002US.P5

		NON PATENT LITERATURE DOCUMENTS	_
Examiner Initials *	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T 2
		Application Serial No: 10/660,997 Office Communication Mailed 03/13/06 (DIBIS-0002US.P2)	
		Application Serial No: 10/660,997 Office Communication Mailed 05/26/06 (DIBIS-0002US.P2)	
		Application Serial No: 10/660,997 Office Communication Mailed 09/18/06 (DIBIS-0002US.P2)	
		Application Serial No: 10/660,997 Office Communication Mailed 11/21/06 (DIBIS-0002US.P2)	
		Application Serial No: 10/660,997 Office Communication Mailed 04/26/07 (DIBIS-0002US.P2) with associated Information Disclosure Statement filed 02/20/2007	
		Application Serial No: 10/660,122 Office Communication Mailed 03/17/06 (DIBIS-0002US.P3)	
		Application Serial No: 10/660,122 Office Communication Mailed 07/06/06 (DIBIS-0002US.P3)	
		Application Serial No: 10/660,122 Office Communication Mailed 09/19/06 (DIBIS-0002US.P3)	
		Application Serial No: 10/660,122 Office Communication Mailed 04/20/07 (DIBIS-0002US.P3)	
		Application Serial No: 10/660,122 Office Communication Mailed 09/19/07 (DIBIS-0002US.P3)	
		Application Serial No: 10/660,122 Office Communication Mailed 03/21/08 (DIBIS-0002US.P3)	
		Application Serial No: 10/660,996 Office Communication Mailed 02/28/06 (DIBIS-0002US.P4)	
		Application Serial No: 10/660,996 Office Communication Mailed 05/30/06 (DIBIS-0002US.P4)	

Examiner	Date
Signature	Considered

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance

and not considered. Include copy of this form with next communication to applicant.

*Applicants' unsigned called necessary of the form with next communication to applicant.

*Applicants' unsigned called necessary communication number optionism," Applicants in suples on check must keer if English Inaquagner Translation is natached.

This collection of information is required by 37 CFR 1.98. The information is required to Odain or retain a benefit by the public which is to file (and by the USPTO) to process an application. Confidentiality is governed by 35 U.S. C. 122 and 37 CFR 1.41. This collection is estimated to take 120 minutes. to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450

Substitute fe	or form 1449/PTO				Complete if Known
INICOL	ON A TION	DIO.	CLOSURE	Application Number	10/660,998
				Filing Date	9/12/2003
STATI	EMENT B	ΥAI	PPLICANT	First Named Inventor	David Ecker
				Art Unit	1637
	(Use as many she	ets as	necessary)	Examiner Name	Suryaprabha Chanduru
Sheet	12	of	25	Attorney Docket Number	DIBIS-0002US.P5

Examiner Initials *	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T 2
		Application Serial No: 10/660,996 Office Communication Mailed 07/12/06 (DIBIS-0002US.P4)	
		Application Serial No: 10/660,996 Office Communication Mailed 09/05/06 (DIBIS-0002US.P4)	
		Application Serial No: 10/660,996 Office Communication Mailed 11/22/06 (DIBIS-0002US.P4)	
		Application Serial No: 10/660,996 Office Communication Mailed 07/10/07 (DIBIS-0002US.P4) with associated Information Disclosure Statement filed 02/21/2007	
		Application Serial No: 11/331,978 Office Communication Mailed 11/15/07 (DIBIS-0002US.C8)	
		Application Serial No: 11/331,987 Office Communication Mailed 07/16/07 (DIBIS-0002US.C9)	
		Application Serial No: 11/331,987 Office Communication Mailed 10/22/07 (DIBIS-0002US.C9)	
		Application Serial No: 09/891,793 Office Communication Mailed 12/18/02 (DIBIS-0003US)	
		Application Serial No: 09/891,793 Office Communication Mailed 08/26/03 (DIBIS-0003US)	
		Application Serial No: 09/891,793 Office Communication Mailed 11/13/03 (DIBIS-0003US)	
		Application Serial No: 09/891,793 Office Communication Mailed 03/09/04 (DIBIS-0003US)	
		Application Serial No: 09/891,793 Office Communication Mailed 06/14/04 (DIBIS-0003US)	
		Application Serial No: 09/891,793 Office Communication Mailed 07/13/04 (DIBIS-0003US)	

Examiner	Date
Signature	Considered

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance

and not considered. Include copy of this form with next communication to applicant.

*Applicants' unsigned called necessary of the form with next communication to applicant.

*Applicants' unsigned called necessary communication number optionism," Applicants in suples on check must keer if English Inaquagner Translation is natached.

This collection of information is required by 37 CFR 1.98. The information is required to Odain or retain a benefit by the public which is to file (and by the USPTO) to process an application. Confidentiality is governed by 35 U.S. C. 122 and 37 CFR 1.41. This collection is estimated to take 120 minutes. to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450

1	Substitute	for form 1449/PTO				Complete if Known
L	INITO	ON A TION	ь.	CLOSURE	Application Number	10/660,998
L					Filing Date	9/12/2003
L	SIAI	EMENI B	ΥAI	PPLICANT	First Named Inventor	David Ecker
L					Art Unit	1637
L		(Use as many she	eets as	necessary)	Examiner Name	Suryaprabha Chanduru
\angle	Sheet	13	of	25	Attorney Docket Number	DIBIS-0002US.P5

NON PATENT LITERATURE DOCUMENTS					
Examiner Initials *	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T 2		
		Application Serial No: 09/891,793 Office Communication Mailed 08/10/04 (DIBIS-0003US)			
		Application Serial No: 09/891,793 Office Communication Mailed 10/20/04 (DIBIS-0003US)			
		Application Serial No: 09/891,793 Office Communication Mailed 03/08/05 (DIBIS-0003US)			
		Application Serial No: 09/891,793 Office Communication Mailed 05/19/05 (DIBIS-0003US)			
		Application Serial No: 09/891,793 Office Communication Mailed 08/11/05 (DIBIS-0003US)			
		Application Serial No: 09/891,793 Office Communication Mailed 03/16/06 (DIBIS-0003US)			
		Application Serial No: 09/891,793 Office Communication Mailed 07/12/06 (DIBIS-0003US)	H		
		Application Serial No: 09/891,793 Office Communication Mailed 09/13/06 (DIBIS-0003US)	H		
		Application Serial No: 09/891,793 Office Communication Mailed 11/20/06 (DIBIS-0003US)			
		Application Serial No: 10/754,415 Office Communication Mailed 03/13/06 (DIBIS-0003US.P2)			
		Application Serial No: 10/754,415 Office Communication Mailed 08/28/06 (DIBIS-0003US.P2)			
		Application Serial No: 10/754,415 Office Communication Mailed 11/17/06 (DIBIS-0003US.P2)			
		Application Serial No: 10/754,415 Office Communication Mailed 02/27/07 (DIBIS-0003US.P2)			

Examiner	Date
Signature	Considered

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance

and not considered. Include copy of this form with next communication to applicant.

*Applicants' unsigned called necessary of the form with next communication to applicant.

*Applicants' unsigned called necessary communication number optionism," Applicants in suples on check must keer if English Inaquagner Translation is natached.

This collection of information is required by 37 CFR 1.98. The information is required to Odain or retain a benefit by the public which is to file (and by the USPTO) to process an application. Confidentiality is governed by 35 U.S. C. 122 and 37 CFR 1.41. This collection is estimated to take 120 minutes. to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450

Substitu	te for form 1449/PTO			Complete if Known		
INIT	DIMATION	DIO	CL OCUPE	Application Number	10/660,998	
	DRMATION			Filing Date	9/12/2003	
STA	TEMENT B	Y A	PPLICANT	First Named Inventor	David Ecker	
				Art Unit	1637	
	(Use as many she	ets as	necessary)	Examiner Name	Suryaprabha Chanduru	
Sheet	14	of	25	Attorney Docket Number	DIBIS-0002US.P5	

NON PATENT LITERATURE DOCUMENTS					
Examiner Initials *	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T 2		
		Application Serial No: 10/754,415 Office Communication Mailed 08/30/07 (DIBIS-0003US.P2)			
		Application Serial No: 10/754,415 Office Communication Mailed 10/10/07 (DIBIS-0003US.P2)			
		Application Serial No: 10/728,486 Office Communication Mailed 04/10/06 (DIBIS-0012US.P1)			
		Application Serial No: 10/728,486 Office Communication Mailed 07/27/06 (DIBIS-0012US.P1)			
		Application Serial No: 10/728,486 Office Communication Mailed 10/17/06 (DIBIS-0012US.P1)			
		Application Serial No: 10/728,486 Office Communication Mailed 12/20/06 (DIBIS-0012US.P1)			
		Application Serial No: 10/728,486 Office Communication Mailed 05/11/07 (DIBIS-0012US.P1)			
		Application Serial No: 10/728,486 Office Communication Mailed 01/17/08 (DIBIS-0012US.P1)			
		Application Serial No: 10/418,514 Office Communication Mailed 09/29/05 (DIBIS-0035US)			
		Application Serial No: 10/418,514 Office Communication Mailed 02/27/06 (DIBIS-0035US)			
		Application Serial No: 10/418,514 Office Communication Mailed 03/27/07 (DIBIS-0035US)			
		Application Serial No: 10/418,514 Office Communication Mailed 12/06/07 (DIBIS-0035US)			
		Application Serial No: 10/418,514 Office Communication Mailed 04/15/08 (DIBIS-0035US)			

Examiner	Date
Signature	Considered

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance

and not considered. Include copy of this form with next communication to applicant.

*Applicants' unsigned called necessary of the form with next communication to applicant.

*Applicants' unsigned called necessary communication number optionism," Applicants in suples on check must keer if English Inaquagner Translation is natached.

This collection of information is required by 37 CFR 1.98. The information is required to Odain or retain a benefit by the public which is to file (and by the USPTO) to process an application. Confidentiality is governed by 35 U.S. C. 122 and 37 CFR 1.41. This collection is estimated to take 120 minutes. to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450

Substit	te for form 1449/PTO			Complete if Known		
	DAMA TION	DIO	CL OCUPE	Application Number	10/660,998	
	DRMATION			Filing Date	9/12/2003	
STA	TEMENT B	Y A	PPLICANT	First Named Inventor	David Ecker	
				Art Unit	1637	
	(Use as many sh	eets as	necessary)	Examiner Name	Suryaprabha Chanduru	
Sheet	15	of	25	Attorney Docket Number	DIBIS-0002US.P5	

NON PATENT LITERATURE DOCUMENTS					
Examiner Initials *	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher (ty) and/or country where published.	T 2		
		Application Serial No: 11/059,776 Office Communication Mailed 01/19/07 (DIBIS-0052US)			
		Application Serial No: 11/059,776 Office Communication Mailed 05/29/07 (DIBIS-0052US)			
		Application Serial No: 11/060,135 Office Communication Mailed 12/21/06 (DIBIS-0057US1)			
		Application Serial No: 11/060,135 Office Communication Mailed 03/08/07 (DIBIS-0057US1)			
		Application Serial No: 11/060,135 Office Communication Mailed 07/24/07 (DIBIS-0057US1)			
		Application Serial No: 11/210,516 Office Communication Mailed 06/08/07 (DIBIS-0078US1)			
		Application Serial No: 11/210,516 Office Communication Mailed 10/19/07 (DIBIS-0078US1)			
		Application Serial No: 11/409,535 Office Communication Mailed 10/31/07 (DIBIS-0083US1)			
		BAHRMAND et al., "Polymerase chain reaction of bacterial genomes with single universal primer: application to distinguishing mycobacteria species" Molecular and Cellular Probes (1996) 10:117-122.			
		BAHRMAND et al., "Use of restriction enzyme analysis of amplified DNA coding for the hsp65 gene and polymerase chain reaction with universal primer for rapid differentiation of mycobacterium species in the clinical laborator." Scandinvalun Journal of Infectious Disease; (1998) 304/74-80.			
		BASTIA et al., "Organelle DNA analysis of Solanum and Brassica somatic hybrids by PCR with universal primers." Theoretical and Applied Genetics (2001) 102:1265-1272.			
		BATEY et al., "Preparation of Isotopically Labeled Ribonucleotides for Multidimensional NMR Spectroscopy of RNA" Nucleic Acids Research (1992) 20:4515-4523			
		BLAST Search results (03/2006)			

Examiner	Date
Signature	Considered

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Applicant's unique citation designation number (optional). Applicant is to place a check mark here if English language Translation is attached

This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 120 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Substitute for form 1449/PTO	Complete if Known		
INFORMATION DIGGLOCUPE	Application Number	10/660,998	
INFORMATION DISCLOSURE	Filing Date	9/12/2003	
STATEMENT BY APPLICANT	First Named Inventor	David Ecker	
	Art Unit	1637	
(Use as many sheets as necessary)	Examiner Name	Suryaprabha Chanduru	
Sheet 16 of 25	Attorney Docket Number	DIBIS-0002US.P5	

Examiner Initials *	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T²
		BOIVIN-JAHNS et al., "Bacterial Diversity in a Deep-Subsurface Clay Environment" Applied and Environmental Microbiology (1996) 62:3405-3412.	
		BORROW et al., "SiaD PCR Elisa for confirmation and identification of serogroup Y and W135 meningococcal infections" FEMS Microbiological Letters (1998) 159:209-214.	
		BOWEN et al., "The native virulence plasmid combination affects the segregational stability of a theta- replicating shuttle vector in bacillus anthracis var, New Hampshire" J. Appl. Microbiol. (1999) 87:270-278.	
		CARRACEDO et al., "DNA commission of the international society for forensic genetics: guidelines for mitochondrial DNA typing" Forensic Science International (2000) 110:79-85.	
		CASE et al., "Maternal inheritance of mitochondrial DNA polymorphisms in cultured human fibroblasts," Somatic Cell Genetics (1981) 7:103-108.	
		CESPEDES et al., "Polymerase chain reaction restriction fragment length polymorphism analysis of a short fragment of the cytochrome b gene for identification of flatfish species" J. Food Protection (1998) 61:1684-1685.	
		CHANG, PK. et al., "affT, a MFS transporter-encoding gene located in the aflatoxin gene cluster, does not have a significant role in aflatoxin secretion," Fungal Genet.Biol. (2004) 41:911-920.	
		CHEN et al., "Universal primers for amplification of mitochondrial small subunit ribosomal RNA-encoding gene in scleractinian corals" Marine Biotechnology (2000) 2:146-153.	
		CHEN, N. et al., "The genomic sequence of ectromelia virus, the causative agent of mousepox," Virology (2003) 317:165-186.	
		CHO et al., "Application of the ribonuclease P (RNase P) RNA gene sequence for phylogenetic analysis of the gene Saccharomonospora" International Journal of Systematic Bacteriology (1998) 48:1223-1230.	
		CORNEL et al., "Polymerase chain reaction species diagnostic assay for Anopheles quadrimaculatus cryptic species (Diptera: Culicidae) based on ribosomal DNA ITS2 sequences" Journal of Medical Entomology (1996) 33:109-116.	
		CRAIN et al., "Applications of mass spectrometry of the characterization of oligonucleotides and nucleic acids" Curr. Opin. Biotechnol. (1998) 9:25-34.	
		DEFORCE et al., "Analysis of oligonucleotides by ESI-MS" Advances in Chromatography (2000) 40:539- 566.	

Examiner Signature	Date Considered	

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance

[&]quot;EXAMINET: Initial if reference considered, whether or not catalon is in contominance with whether. Initial if reference considered, whether or not catalon is in contominance with whether. Initial in the initial in to complete, including gathering, proparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief information Officer, U.S. Petert and Trademark Office. U.S. Department of Commerce, P. Des v.1450, Alexandria, VA 22313-100 DN OTS ESND. FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Substitute t	or form 1449/PTO			Complete if Known		
	ON A TION	DIO.	CL COLUBE	Application Number	10/660,998	
			CLOSURE	Filing Date	9/12/2003	
SIAI	EMENIB	ΥAI	PPLICANT	First Named Inventor	David Ecker	
				Art Unit	1637	
	(Use as many she	ets as	necessary)	Examiner Name	Suryaprabha Chanduru	
Sheet 17 of 25				Attorney Docket Number	DIBIS-0002US.P5	

		NON PATENT LITERATURE DOCUMENTS					
Examiner Initials *	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T²				
		DINAUER et al., "Sequence-based typing of HLA class II DQB1" Tissue Angens (2000) 55:364-368.					
		DUBERNET et al., "A PCR-based method for identification of Lactobacilli at the genus level" FEMS Microbiology Letters (2002) 214:271-275.					
		ELNIFRO et al., "PCR and Restriction Endonuclease Analysis for Rapid Identification of Adenovirus Subgenera" Journal of Clinical Microbiology (2000) 38:2055-2061.					
		EMBL Accession No. S90302, Human, Muscle, Mitochondrial Mutant, 22 nt, segment 2 of 2 (XP002436791) 11/26/1993.					
		ESMANS et al., "Liquid Chromatography-Mass Spectrometry in Nucleoside, nucleotide and modified nucleotide characterization" <i>J. of Chromatography A</i> (1998) 794:109-127.					
		European Search Report for 02709785.6 dated 10/10/2005					
		FIGUEIREDO et al., "Identification of Brazilian flaviviruses by a simplified reverse transcription-polymerase chain reaction method using Flavivirus universal primers" American Journal of Tropical Medicine and Hyeinen (1998) 59:357-362.					
		FOX et al., "Identification and Detection of Bacteria: Electrospray MS-MS Versus Derivatization GC-MS" Proceedings of the ERDEC Scientific Conference on Chemical and Biological Defense Research (1994) 39- 44.					
		FRASER et al., "The Minimal Gene Complement of Mycoplasma Genitalium" Science (1995) 270:397-403.					
		FUERSTENAU et al., "Molecular Weight Determination of Megadalton DNA Electrospray Ions Using Charge Detection Time-of-flight Mass Spectrometry" Rapid Comm. Mass Spec. (1995) 9:1528-1538					
		FUJIOKA et al., "Analysis of enterovirus genotypes using single-strand conformation polymorphisms of polymerase chain reaction products" <i>J. Virol. Meth.</i> (1995) 51:253-258.					
		GABRIEL et al., "Improved ntDNA sequence analysis of forensic remains using a "mini-primer set" amplification strategy" Journal of Forensic Sciences (2001) 46:247-253.					
		GINTHER et al., "Identifying individuals by sequencing mitochondrial DNA from teeth," Nature Genetics (1992) 2:135-138.					

Examiner Signature	Date Considered	

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance

[&]quot;EXAMINET: Initial if reference considered, whether or not catalon is in contominance with whether. Initial if reference considered, whether or not catalon is in contominance with whether. Initial in the initial in to complete, including gathering, proparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief information Officer, U.S. Petert and Trademark Office. U.S. Department of Commerce, P. Des v.1450, Alexandria, VA 22313-100 DN OTS ESND. FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Substitute f	or form 1449/PTO			Complete if Known		
INITOT	ON A TION	DIO.	CL CCLIDE	Application Number	10/660,998	
			CLOSURE	Filing Date	9/12/2003	
STAT	EMENT B	ΥAI	PPLICANT	First Named Inventor	David Ecker	
				Art Unit	1637	
	(Use as many she	ets as	necessary)	Examiner Name	Suryaprabha Chanduru	
Sheet	18	of	25	Attorney Docket Number	DIBIS-0002US.P5	

		NON PATENT LITERATURE DOCUMENTS					
Examiner Initials *	Cite (No.*) Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.						
		GILES et al., "Maternal inheritance of human mitochondrial DNA," PNAS (1980) 77:6715-6719.					
		GOTO et al., "Applications of the partial 16S rDNA sequence as an index for rapid identification of species in the genus Bacillus" J. Gen. Appl. Microbiol. (2000) 46:1-8.					
		GREENBERG et al., "Intraspecific nucleotide sequence variability surrounding the origin of replication in human mitochondrial DNA," Gene (1983) 21:33-49.					
		GRIFFIN et al., "Single-nucleotide polymorphism analysis by MALDI-TOF mass spectrometry" Trends in Biotechnology (2000) 18:77-84					
		GRZYBOWSKI "Extremely high levels of human mitochondrial DNA heteroplasmy in single hair roots" Electrophoresis (2000) 21:548-553.					
		HAHNER et al., "Analysis of short tandem repeat polymorphisms by electrospray ion trap mass spectrometry" Nucleic Acids Research (2000) 28:E82.					
		HANNIS et al., "Genotyping complex short tandem repeats using electrospray ionization Fourier transform ion cyclotron resonance multistage mass spectrometry" Proceedings of SPIE - The International Society for Optical Engineering (2000) 3926:36-47.					
		HAUGLAND et al., "Identification of putative sequence specific PCR primers for detection of the toxigenic fungal species Stachybotrys chartarum" Mol. Cell. Probes (1998) 12:387-396.					
		HENCHAL et al., "Sensitivity and specificity of a universal primer set for the rapid diagnosis of dengue virus infections by polymerase chain reaction and nucleic acid hybridization" American Journal of Tropical Medicine and Hygiene (1991) 45418-428.					
		HERRMANN et al., "Differentiation of Chlamydia spp. By Sequence Determination and Restriction Endonuclease Cleavage of RNase P RNA Genes" J. Clin. Microbiol. (1996) 34:1897-1902.					
		HIGGINS et al., "Competitive oligonucleotide single-base extension combined with mass spectrometric detection for mutation screening" BioTechniques (1997) 23:710-714.					
		HOLLAND et al., "Mitochondrial DNA Sequence Analysis of Human Skeletal Remains: Identification of Remains from the Vietnam War," Journal of Forensic Sciences (1993) 38:542-553.					
		HOLM et al., "Removing near-neighbour redundancy from large protein sequence collections" <i>Bioinformatics</i> (1998) 14:423-429.					

Examiner	Date
Signature	Considered

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609, Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Applicant's unique citation designation number (optional). Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFF 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by

the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 120 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Substitute	for form 1449/PTO			Complete if Known		
INIEO	DMATION	DIO.	CL OCUPE	Application Number	10/660,998	
			CLOSURE	Filing Date	9/12/2003	
STAT	EMENTB	ΥAI	PPLICANT	First Named Inventor	David Ecker	
				Art Unit	1637	
	(Use as many she	ets as	necessary)	Examiner Name	Suryaprabha Chanduru	
Sheet 19 of 25		Attorney Docket Number	DIBIS-0002US.P5			

		NON PATENT LITERATURE DOCUMENTS				
Examiner Initials *	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue No. ¹					
		HONDA et al., "Universal method of hypersensitive nested PCR toward forensic DNA typing" International Congress Series (1998) 7:28-30.				
		HURST et al., "MALDI-TOF Analysis of Polymerase Chain Reaction Products from Methanotrophic Bacteria" Anal. Chem. (1998) 70:2693-2698.				
		HUTCHISON et al., "Maternal inheritance of mammalian mitochondrial DNA," Nature (1974) 251:536-538.				
		INGMAN et al., "Mitochondrial genome variation and the origin of modern humans" Nature (2000) 408:708-713.				
		International Search Report for PCT/US02/20336 dated 02/03/2003 (DIBIS-0003WO)				
		International Search Report for PCT/US03/38795 dated 04/19/2004 (DIBIS-0002WO2)				
		International Prelim. Exam. Report for PCT/US02/20336 dated 05/12/2004 (DIBIS-0003WO)				
		International Search Report for PCT/US03/38757 dated 06/24/2004 (DIBIS-0002WO4)				
		International Search Report for PCT/US03/38830 dated 08/25/2004 (DIBIS-0002WO3)				
		International Search Report for PCT/US03/38761 dated 12/30/2005 (DIBIS-0012WO)				
		International Search Report for PCT/US2004/011877 dated 04/20/2006 (DIBIS-0035WO)				
		International Search Report for PCT/US2005/000386 dated 05/09/2006 (DIBIS-0003WO2)				
		International Search Report for PCT/US2005/018031 dated 06/28/2006 (DIBIS-0060WO)				

Examiner	Date
Signature	Considered

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance

and not considered. Include copy of this form with next communication to applicant.

*Applicants' unsigned called reducing the control of the to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Substitute f	or form 1449/PTO			(Complete if Known
INITOT	ON A TION	DIO.	CL COLUBE	Application Number	10/660,998
			CLOSURE	Filing Date	9/12/2003
SIAI	EMENIB	ΥAI	PPLICANT	First Named Inventor	David Ecker
				Art Unit	1637
	(Use as many she	ets as	necessary)	Examiner Name	Suryaprabha Chanduru
Sheet 20 of 25				Attorney Docket Number	DIBIS-0002US.P5

	NON PATENT LITERATURE DOCUMENTS						
Examiner Initials *	Cite No.1						
		JANSEN et al., "Genotype-by-environment Interaction in Genetic Mapping of Multiple Quantitative Trait Loci" Theor. Appl. Genet. (1995) 91:33-37.					
		JIANG et al., "Multiple Trait Analysis of Genetic Mapping for Quantitative Trait Loci Genetics" Genetics (1995) 140:1111-1127.					
		JIANG et al., "A highly efficient and automated method of purifying and desalting PCR products for analysis by electrospray ionization mass spectrometry." Anal. Biochem. (2003) 316:50-57.					
		JOHNSON et al., "Precise molecular weight determination of CPR products of the rRNA intergenic spacer region using electrospray quadrupole mass spectroemtry for differentiation of B. subtilis and B. atrophaeus, closely related species of bacilif "Journal of Microphological Methods (2000) 0/241-254.					
		JURINKE et al., "Detection of hepatitis B virus DNA in serum samples via nested PCR and MALDI-TOF mass spectrometry" Genetic Analysis: Biomolecular Engineering (1996) 13:67-71.					
		KE et al., "Development of a PCR Assay for Rapid Detection of Enterococci" Journal of Clinical Microbiology (1999) 37:3497-3503.					
		KELLER et al., "Empirical Statistical Model To Estimate the Accuracy of Peptide Identifications Made by MS/MS and Database Search" Anal. Chem (2002) 74:5383-5392.					
		KILPATRICK et al., "Group-Specific Identification of Polioviruses by PCR Using Primer Containing Mixed- Base or Deoxyinosine Residues at Positions of Codon Degeneracy" J. Clin. Microbiol. (1996) 34:2990-2996.					
		KRAHMER et al., "Electrospray quadrupole mass spectrometry analysis of model oligonucleotides and polymerase chain reaction products: determination of base substitutions, nucleotide additions/deletions, and chemical modifications" Anal. Chem. (1999) 71:2893-2900					
		KRAHMER et al., "MS for identification of single nucleotide polymorphisms and MS/MS for discrimination of isomeric PCR products" Anal. Chem. (2000) 72:4033-4040.					
		KUPKE et al., "Molecular Characterization of Lantibiotic-synthesizing Enzyme EpiD Reveals a Function for Bacterial Dfp Proteins i Coenzyme A Biosynthesis" <i>Journal of Biological Chemistry</i> (2000) 275:31838- 31846.					
		LACROIX et al., "PCR-Based Technique for the Detection of Bacteria in Semen and Urine" J. Microbiol. Meth. (1996) 26:61-71.					
		LEBEDEV, Y. et al "Oligonucleotides containing 2-aminoadenine and 5-methycytosine are more effective as primers for PCR amplification than their nonmodified counterparts" Genetic Analysis: Biomolecular Engineering (1996) 131-15-21					

Examiner	Date
Signature	Considered

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Applicant's unique citation designation number (optional). Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1,98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1,14. This collection is estimated to take 120 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief information Officer, U.S. Peatert and Trademark Office, U.S. Department of Commerce, P.O. Box 1460, Alexandria, VA 22313-1460. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Substitute	for form 1449/PTO				Complete if Known
INITO	ON A TION	DIO.	CL COLUDE	Application Number	10/660,998
			CLOSURE	Filing Date	9/12/2003
STAT	EMENT B	ΥAI	PPLICANT	First Named Inventor	David Ecker
				Art Unit	1637
	(Use as many she	ets as	necessary)	Examiner Name	Suryaprabha Chanduru
Sheet	21	of	25	Attorney Docket Number	DIBIS-0002US.P5

NON PATENT LITERATURE DOCUMENTS					
Examiner Initials *	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, dity and/or country where published.	т:		
		LEIF et al., "Isolation and characterization of the proton-translocating NADH: ubiquinone oxidoreductase from Escherichia coli" Eur. J. Biochem. (1995) 230:538-548.			
		LEWERS et al., "Detection of Linked QTL for Soybean Brown Stem Rot Resistance in 'BSR 101' as Expressed in a Growth Chamber Environment" Molecular Breeding (1999) 5:33-42.			
		LI et al., "Single nucleotide polymorphism determination using primer extension and time of flight mass spectrometry" <i>Electrophoresis</i> (1999) 20:1258-1265.			
		LITTLE et al., "MALDI on a Chip: Analysis of Arrays of Low-Femtomole to Subfemtomole Quantities of Synthetic Oligonucleotides and DNA Diagnostic Products Dispensed by a Piezoelectric Pipet" Analytical Chemistry (1977) 69:454-646.			
		LIU et al., "An unusual gene arrangement for the putative chromosome replication origin and circadian expression of dnaN in Synechococcus sp. Strain PCC 7942" Gene (1996) 172:105-109.			
		LOAKES et al., "Nitroindoles as universal bases" Nucleosides and Nucleotides (1995) 14:1001-1003.			
		LOVE et al., "Cloning and sequence of the groESL heat-shock operon of Pasteurella multocida" Gene (1995) 166:179-180.			
		MAIWALD et al., "Characterization of contaminating DNA in Taq polymerase which occurs during amplification with a primer set for Legionella 58 ribosomal RNA" Molecular and Cellular Probes (1994) 8:11-14.			
		MARTEMYANOV et al., "Extremely Thermostable Elongation Factor G from Aquifex acolicus: Cloning, Expression, Purification, and Characterization in a Heterologous Translation System" <i>Protein Expr. Purif.</i> (2000) 18:257-261.			
		MATRAY et al., "Synthesis and properties of RNA analogs - oligoribonucleotide N3'->P5' phosphoramidates" Nucleic Acids Res (1999) 3976-3985.			
		MCLAFFERTY et al., "Comparison of Algorithms and Databases for Matching Unknown Mass Spectra" J. Am. Soc. Mass Spectrom. (1998)			
		MESSMER et al., "Discrimination of Streptococcus pneumoniae from other upper respiratory tract streptococci by arbitrarily primed PCR" Clinical Biochemistry (1995) 28:567-572.			
		MILLER et al., "A compendium of human mitochondrial DNA control region: development of an international standard forensic database," Croat Med. J. (2001) 42:315-327.			

Examiner Signature	Date Considered	

[&]quot;EXAMINER: initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Applicant's naive citation designation number optionals." Applicant is to labe as check mark here if English language Translation is attached. This contection of information is required by 37 CFR 198. The information is required to obtain or retain a sensell by the public which is to file (and by the USPTO is possess) an application. Confidentiality is operated by 35 USC 1,22 and 37 OFR 1.4.1 This collection is estimated to take 120 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents. P.O. Box 1450. Alexandria, VA 22313-1450.

0.4.40.4.6	or form 1449/PTO				
Substitute it	3/ 10/11/ 1449/P1O				Complete if Known
INFOR	MATION	DIE	CLOSURE	Application Number	10/660,998
				Filing Date	9/12/2003
STATE	EMENT B	YA	PPLICANT	First Named Inventor	David Ecker
				Art Unit	1637
	(Use as many she	ets as	necessary)	Examiner Name	Suryaprabha Chanduru
Sheet 22 of 25		Attorney Docket Number	DIBIS-0002US.P5		

	_	NON PATENT LITERATURE DOCUMENTS				
Examiner Initials *	Cite No.1					
		MORSE et al., "Nucleotide Sequence of Part of the ropC Gene Encoding the B Subunit of DNA-Dependent RNA Polymerase from some Gram-Positive Bacteria and Comparative Amino Acid Sequence Analysis" System Appl. Microbiol. (1996) 19:150-157.				
		MUDDIMAN et al., "Application of secondary ion and matrix-assisted laser desorption-ionization time-of- flight mass spectrometry for the quantitative analysis of biological molecules" Mass Spectrometry Reviews (1995) 14383-429.				
		MUDDIMAN et al., "Important aspects concerning the quantification of biomolecules by time-of-flight secondary-ion mass spectrometry" Applied Spectroscopy (1996) 50:161-166.				
		MUHAMMAD et al., "Electrospray ionization quadrupole time-of-flight mass spectrometry and quadrupole mass spectrometry for genotyping single nucleotide substitutions in intart polymerase chain reaction products in K-ras and p53" Rapid Commun. Mass Spectrom. (2002) 16:2278-2285.				
		MUSHEGIAN et al., "A minimal gene set for ceullular life derived by comparison of complete bacterial genomes" Proc. Natl. Acad. Sci. USA (1996) 93:10268-10273.				
		NAKAO et al., "Development of a Direct PCR Assay for Detection of the Diphtheria Toxin Gene" J. Clin. Microbiol. (1997) 35:1651-1655.				
		NAUMOV et al., "Discrimination of the Soil Yest Species Williopsis saturnus and Williopsis suaveolens by the Polymerase Chain Reaction with the Universal Primer N21" Microbiology (Moscow) (Translation of Mikrobiology) (2000) (6):229-233.				
		NILSSON et al., "Evaluation of mitochondrial DNA coding region assays for increased discrimination in forensic analysis" Forensic Science International: Genetics (2008) 2:1-8.				
		NISHIKAWA et al., "Reconstitution of active recombinant Shiga toxin (Stx)I from recombinant Stxl-A and Stxl-B subunits independently produced by E. coli clones" FEMS (1999) 178:13-18.				
		NORDER et al., "Typing of Hepatitis B Virus Genomes by a Simplified Polymerase Chain Reaction" J. Med. Virol. (1990) 31:215-221.				
		PATERSON et al., "Fine Mapping of Quantitative Trait Loci Using Selected Overlapping Recombinant Chromosomes, in an Interspecies Cross of Tomato" Genetics (1990) 124:735-742.				
		RAAUM, R. L. et al., "Catarrhine primate divergence dates estimated from complete mitochondrial genomes: concordance with fossil and nuclear DNA evidence," J. Hum. Evol. (2005) 48:237-257.				
		REID et al., "Primary diagnosis of foot-and-mouth disease by reverse transcription polymerase chain reaction" Journal of Virological Methods (2000) 89:167-176.				

$\overline{}$		
Examiner Signature	Date Considered	

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance

and out constituted, include copy of this form with next constrained in the applicant.

Applicant's universel, include copy of this form with next constrained in the applicant.

Applicant's universel, include copy of this form with next constrained in the applicant of the appli The USP I/O to process; an application. Conflicentiality is governed by 35 U.S.C. 122 and 37 CF-Y.1.1.4. This collection is estimated to taxe 1.2d immunes to complete, inclining pathering, preparing, and submitting the completed application form to the USPFO. Time will vary depending unless the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Childman information Officer. U.S. Patert and Trademark Office. U.S. Department of Commerce, P.O. Sox 1450, Alexandria, VA 22313-1450. DN NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450

Substitute for form 1449/PTO		Complete if Known
INFORMATION DIGGLOCURE	Application Number	10/660,998
INFORMATION DISCLOSURE	Filing Date	9/12/2003
STATEMENT BY APPLICANT	First Named Inventor	David Ecker
	Art Unit	1637
(Use as many sheets as necessary)	Examiner Name	Suryaprabha Chanduru
Sheet 23 of 25	Attorney Docket Number	DIBIS-0002US.P5

	NON PATENT LITERATURE DOCUMENTS					
Examiner Initials *	Cite No.1					
		REILLY et al., "Design and use of 16S ribosomal DNA-directed primers in competitive PCRs to enumerate proteolytic bacteria in the rumen" <i>Microb. Ecol.</i> (2002) 43:259-270.				
		ROSS et al., "Analysis of DNA fragments from conventional and microfabricated PCR devices using delayed extraction MALDI-TOF mass spectrometry" Anal. Chem. (1998) 70:2067-2073.				
		SALA et al., "Ambiguous base pairing of the purine analogue 1-(20deoxy-B-D-ribofuranosyl)-imidazole-4- carboxamide during PCR" Nucl. Acids Res. (1996) 24:3302-3306.				
		SAUER et al., "A novel procedure for efficient genotyping of single nucleotide polymorphisms" Nucleic Acids Research (2000) 28:E13.				
		SCHENA M. "Genome analysis with gene expression microarrays" Bioessays (1996) 18:427-431				
		SCHRAM et al., "Mass Spectrometry of Nucleic Acid Components" Biomedical Applications of Mass Spectrometry (1990) 34:203-280.				
		SCHULTZ et al., "Polymerase chain reaction products analyzed by charge detection mass spectrometry" Rapid Communications in Mass Spectrometry (1999) 13:15-20.				
		SENKO et al., "Determination of Monoisotopic Masses and Ion Populations for Large Biomolecules from Resolved Isotopic Distributions," J. Am. Soc. Mass Spectrom. (1995) 6:229.				
		SESHARDI et al., "Differential Expression of Translational Elements by Life Cycle Variants of Coxiella burnetii" Infect. Immun. (1999) 67:6026-6033.				
		SHAVER et al., "Variation in 168-238 rRNA intergenic spacer regions among Bacillus subtilis 168 isolates" Molecular Microbiology (2001) 42:101-109.				
		STONEKING et al., "Population variation of human mDNA control region sequences detected by enzymatic amplification and sequence-specific oligonucleotide probes," American Journal of Human Genetics (1991) 48:370-382.				
		TAKAHASHI et al., "Characterization of gryA, gryB, grlA and grlB mutations in fluoroquinolone-resistant clinical isolates of Staphylococcus aureus" J. Antimicrob. Chemother (1998) 41:49-57.				
		TAKEUCHI et al., "Scrotyping of Adenoviruses on Conjunctival Scrapings by PCR and Sequence Analysis" Journal of Clinical Microbiology (1999) 37:1839-1845.				

Examiner	Date
Signature	Considered

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Applicant's unique citation designation number (optional). Applicant is to place a check mark here if English language Translation is attached

This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 120 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Substitute fe	or form 1449/PTO				Complete if Known
INICOL	MA TION	DIO.	CL COLUDE	Application Number	10/660,998
			CLOSURE	Filing Date	9/12/2003
STATI	EMENT B	ΥAI	PPLICANT	First Named Inventor	David Ecker
				Art Unit	1637
	(Use as many she	ets as	necessary)	Examiner Name	Suryaprabha Chanduru
Sheet	24	of	25	Attorney Docket Number	DIBIS-0002US.P5

		NON PATENT LITERATURE DOCUMENTS	
Examiner Initials *	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T
		TONG et al., "Ligation reaction specificities of an NAD+-dependent DNA ligase from the hyperthermophile Aquifex acolicus" Nucleic Acids Res (2000) 28:1447-1454.	
		VAN AERSCHOT et al., "In search of acyclic analogues as universal nucleosides in degenerate probes" Nucleosides and Nucleotides (1995) 14:1053-1056.	
		VAN BAAR et al., "Characterization of Bacteria by Matrix Assisted Laser Desorption Ionization and Electrospray Mass Spectrometry" FEMS Microbiol. Review (2000) 24:195-219.	
		VAN CAMP et al., "Amplification and sequencing of variable regions in bacteria 238 ribosomal RNA genes with conserved primer sequences" Current Microbiology (1993) 27:147-151.	
		VAN DER VOSSEN et al., "DNA based typing, identification and detection systems for food spoilage microorganisms: development and implementation" Int. J. Food Microbiol. (1996) 33:35-49.	
		VAN ERT et al., "Mass spectrometry provides accurate characterization of two genetic marker types in Bacillus anthracis" <i>Biotechniques</i> (2004) 37:642-651.	
		VANDERHALLEN et al., "Identification of Encephalomyocarditis Virus in Clinical Samples by Reverse Transcription-PCR Followed by Genetic Typing Using Sequence Analysis" J. Clin. Microbiol. (1998) 36:3463-346.	
		WALTERS et al., "Genotyping single nucleotide polymorphisms using intact polymerase chain reaction products by electrospray quadrupole mass spectrometry" Rapid Communications in Mass Spectrometry (2001) 15:1752-1759.	
		WELHAM et al., "The Characterization of Micro-organisms by Matrix-assisted Laser Desorption/Ionization Time-of-flight Mass Spectrometry" Rapid Communications in Mass Spectrometry (1998) 12:176-180.	
		WIDJOJOATMODJO et al., "Rapid Identification of Bacteria by PCR-Single-Strand Conformation Polymorphism" Journal of Clinical Microbiology (1994) 3002-3007.	
		WOLTER et al., "Negative Ion FAB Mass Spectrometric Analysis of Non-Charged Key Intermediates in Oligonucleotide Synthesis: Rapid Identification of Partially Protected Dinucleoside Monophosphates" Biomed. Environ. Mass Spectrom. (1987) 14:111-116.	
		WOO et al., "Identification of Leptospira inadai by continuous monitoring of fluorescence during rapid cycle PCR" Systematic and Applied Microbiology (1998) 21:89-96.	
		WUNSCHEL et al., "Discrimination Among the B. Cereus Group, in Comparison to B. Subtilis, by Structural Carbohydrate Profiles and Ribosomal RNA Spacer Region PCR" System. Appl. Microbiol. (1994) 17:625-635.	

Examiner I Signature I C	Date Considered
--------------------------	--------------------

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance

and out constituted, include copy of this form with next constrained in the applicant.

Applicant's universel, include copy of this form with next constrained in the applicant.

Applicant's universel, include copy of this form with next constrained in the applicant of the appli The USP I/O to process; an application. Conflicentiality is governed by 35 U.S.C. 122 and 37 CF-Y.1.1.4. This collection is estimated to taxe 1.2d immunes to complete, inclining pathering, preparing, and submitting the completed application form to the USPFO. Time will vary depending unless the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Childman information Officer. U.S. Patert and Trademark Office. U.S. Department of Commerce, P.O. Sox 1450, Alexandria, VA 22313-1450. DN NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450

Substitute t	for form 1449/PTO			Complete if Known		
I INITIO	ORA TION	DIO	CL COLUBE	Application Number	10/660,998	
			CLOSURE	Filing Date	9/12/2003	
STAT	EMENT B	ΥAI	PPLICANT	First Named Inventor	David Ecker	
				Art Unit	1637	
	(Use as many she	ets as	necessary)	Examiner Name	Suryaprabha Chanduru	
Sheet	25	of	25	Attorney Docket Number	DIBIS-0002US.P5	

NON PATENT LITERATURE DOCUMENTS						
Examiner Initials *	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T 2			
		WUNSCHEL et al., "Analysis of double-stranded polymerase chain reaction products from the Bacillus cereus group by electrospray ionization Fourier transform ion cyclotron resonance mass spectrometry" Rapid Communications in Mass Spectrometry (1996) 10:29-35.				
		YAO et al., "Mass Spectrometry Based Proteolytic Mapping for Rapid Virus Detection" Anal. Chem. (2002) 74:2529-2534.				
		YASUI et al., "A specific oligonucleotide primer for the rapid detection of Lactobacillus lindneri by polymerase chain reaction" Can. J. Microbiol. (1997) 43:157-163.				
		ZENG et al., "Precision Mapping of Quantitative Trait Loci" Genetics (1994) 136:1457-1468.				
		Table listing related applications and office actions and rejections from those related applications				
		Unpublished U.S. Patent Application No. 10/318,463 filed 12/13/2002.				
		Unpublished U.S. Patent Application No. 11/233,630 filed 09/21/2005.				
		European Application No. EP 02709785.2 filed 9/12/2002, Isis Pharma				
		Chinese Application No. 1202204 filed 12/16/1998, Sequenom				

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Applicant's unique citation designation number (optional). Applicant is to place a check mark here if English language Translation is attached

This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 120 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.